

WHAT IS CLAIMED IS:

1. A system for communicating across at least one communication  
2 medium, said system comprising:

4 a plurality of input subsystems to receive an address string, said address  
string having a valid format recognized by said input subsystems and inputted into  
6 at least one communication application selected from a collection of different types  
of communication applications wherein the same address string can be validly  
inputted for any selected communication application from said collection.

2. The system of Claim 1 wherein said address string is associated with at  
2 least one recipient entity.

3. The system of Claim 1, said input subsystem further comprising:

2 a recognition subsystem to recognize said inputted address string  
having a different format from a format utilized by said selected  
4 communication application; and

6 a mapping subsystem to convert said different format into at least one  
format utilized by said selected communication application.

4. The system of Claim 1, said system further comprising:

2 a selector subsystem to determine at least one communication medium  
based on the selected communication application; and

4 a communication subsystem to establish communication based on the  
address string across said determined communication medium.

Sub A<sup>1</sup> 5. The system of Claim 4, wherein said communication medium is a  
2 homogenous and/or a plurality of heterogeneous mediums.

6. The system of Claim 1 wherein said collection of different communication applications include communication applications of same type and/or same type but with different formats.

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7. The system of Claim 3, said mapping subsystem further comprising:

a translation subsystem to translate each component of said address string to a corresponding predetermined number;

a segmentation subsystem to segment said translated components into at least one subset according to a predetermined segmentation format;

a re-sequencing subsystem to re-sequence said segmented components into an output string of a different sequence format from said inputted address string wherein said output string is in a predetermined re-sequencing format; and

a resolver subsystem to resolve said re-sequenced string into a corresponding valid address format.

8. The system of Claim 7, wherein said corresponding valid address format is used to establish communication with a World Wide Web location.

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9. The system of Claim 1, wherein said collection of different communication applications include communication applications of same type and/or same type but different formats.

10. The system of Claim 9, wherein said communication application is a world wide web resource locator.

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11. The system of Claim 9, wherein said communication application is a telephone service.

12. The system of Claim 9, wherein said communication application is an electronic mail application.

13. The system of Claim 7, said mapping subsystem further comprising:

2 a transmission subsystem to transmit said inputted string to a matching  
subsystem based on said corresponding valid address format, said matching  
4 subsystem to match said inputted string to at least one valid email address wherein  
said valid email address is used to relay communication to said valid email address  
6 destination.

14. The system of Claim 7, said mapping subsystem further comprising:

2 a convertor subsystem to convert said valid address format into a valid email  
address format, said valid email address format comprising of said valid address  
4 format preceded by an "@" symbol and at least one character.

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15. A method for communicating across at least one communication  
medium, said method comprising:

2 receiving an address string having the format of a telephone number and  
4 inputted into at least one communication application selected from a collection of  
different types of communication applications wherein the same address string can  
6 be validly inputted for any selected communication application from said  
collection.

16. The method of Claim 15, said method further comprising:

2 determining at least one communication medium based on the selected  
communication application; and

4 establishing communication across said determined communication  
medium.

17. The method of Claim 16, wherein said communication medium is a  
2 homogenous and/or a plurality of heterogeneous mediums.

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2 18. The method of Claim 15, wherein said collection of different communication applications include communication applications of same type and/or same type but different formats.

2 19. The method of Claim 18, wherein said communication application is a world wide web resource locator.

2 20. The method of Claim 18, wherein said communication application is a telephone service.

2 21. The method of Claim 18, wherein said communication application is an electronic mail application.

2 22. The method of Claim 15, said receiving an address string further comprising:

4 recognizing said inputted address string having a different format from a format utilized by said selected communication application; and

6 mapping said different format into at least one format utilized by said selected communication application.

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2 23. The method of Claim 22, said mapping further comprising:

2 translating each component of said address string to a corresponding predetermined number;

4 segmenting said translated components into at least one subset according to a predetermined segmenting format;

6 re-sequencing said segmented components into an output string of a different sequence format from said inputted address string wherein said output string is in a predetermined re-sequencing format; and

8 resolving said re-sequenced string into a corresponding valid address format.

24. The method of Claim 23, wherein said corresponding valid address format is an Internet website address format.

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25. The method of Claim 15, wherein said address string is associated with at least one recipient entity.

26. The method of Claim 23, said mapping further comprising:

transmitting said inputted string based on said corresponding valid address format; and

receiving said transmitted input string and matching said inputted string to at least one valid email address wherein said valid email address is used to relay communication to said valid email address destination.

27. The method of Claim 23, said mapping further comprising:

converting said valid address format into a valid email address format wherein said valid email address format comprising of said valid address format preceded by an "@" symbol and at least one character.

28. A method for communicating across at least one communication medium, said method comprising:

receiving an address string inputted into a plurality of communication applications selected from a collection of different types of communication applications wherein the same address string can be validly inputted for any selected communication application from said collection.

29. The method of Claim 28, said method further comprising:

determining at least one communication medium based on the selected communication applications; and

establishing communication across said determined communication medium.

30. The method of Claim 28, said receiving an address string further comprising:

recognizing said inputted address string having a different format from a format utilized by said selected communication application; and

mapping said different format into at least one format utilized by said selected communication application.

31. The method of Claim 30, said mapping further comprising:

translating each component of said address string to a corresponding predetermined number;

segmenting said translated components into at least one subset according to a predetermined segmenting format;

re-sequencing said segmented components into an output string of a different sequence format from said inputted address string wherein said output string is in a predetermined re-sequencing format; and

resolving said re-sequenced string into a corresponding valid address format.

32. The method of Claim 31, wherein said corresponding valid address format is an Internet website address format.

33. The method of Claim 31, wherein said corresponding valid address format is an Internet electronic mail address format.

34. The method of Claim 31, wherein said address string is associated with at least one recipient entity.

35. The method of Claim 30, said mapping further comprising:

transmitting said inputted string based on said corresponding valid address format; and

4 receiving said transmitted input string and matching said inputted string to at  
least one valid email address wherein said valid email address is used to relay  
6 communication to said valid email address destination.

36. The method of Claim 30, said mapping further comprising:

2 converting said valid address format into a valid email address format  
wherein said valid email address format comprising of said valid address format  
4 preceded by an "@" symbol and at least one character.

Sub A<sup>7</sup> 37. A method for generating a valid Internet address for an Internet  
2 communication application, said method comprising:

receiving as input at least one inputted string;

4 differentiating between valid components and invalid components in said  
inputted string; and

6 forming at least one valid Internet address for said Internet communication  
application from said valid components.

38. The method of Claim 37, wherein said valid component is a subset string of  
2 an Internet address for said Internet communication application.

39. The method of Claim 37, wherein said inputted string includes commands to  
2 access a specified location on the world wide web.

40. The method of Claim 37, wherein said inputted string includes commands to  
2 send an electronic message to a specified email address.

41. The method of Claim 37, wherein said inputted string includes commands to  
2 establish phone contact with a certain telephone number across the Internet or a conventional  
phone line.

Sub A<sup>8</sup> 42. A system for generating a valid Internet address for an Internet  
2 communication application, said system comprising:

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an input subsystem to receive as input at least one inputted string;

4 a processor subsystem to differentiate between valid components and invalid components in said inputted string; and

6 a configuration subsystem to form at least one valid Internet address for said Internet communication application from said valid components.

2 43. The system of Claim 42, wherein said valid component is a subset string of an Internet address for said Internet communication application.

2 44. The system of Claim 42, wherein said inputted string includes commands to access a specified location on the world wide web.

2 45. The system of Claim 42, wherein said inputted string includes commands to send an electronic message to a specified email address.

2 46. The system of Claim 42, wherein said inputted string includes commands to establish phone contact with a certain telephone number across the Internet or a conventional phone line.

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2 47. A method for converting an address string into a predetermined Internet address format, said method comprising:

4 receiving as input at least one inputted address string, said address string including a plurality of alpha-numeric characters; and

6 re-sequencing said inputted string into an output string of a different sequence format from said inputted address string wherein said output string is in a predetermined Internet address format.

2 48. The method of Claim 47, said re-sequencing further comprising:

segmenting said inputted string into at least one string subset; and



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sequentially re-assembling said subsets based on a corresponding predetermined hierarchical format wherein said format string is in a predetermined Internet address format.

49. The method of Claim 45, wherein said segmenting include separating said inputted string into string subsets in the format of numeric fields in a telephone number.

50. A method for converting an inputted electronic mail address into an Internet email address format, said method comprising:

receiving as input at least one inputted electronic mail address string, said address string including a plurality of alpha-numeric characters; and

converting said inputted string into an output string wherein said output string is in a predetermined email address format.

51. The method of Claim 50, said converting further comprising:

re-sequencing said inputted string into an output string of a different sequence format from said inputted address string.

52. The method of Claim 48, said re-sequencing further comprising:

segmenting said inputted string into at least one string subset; and

sequentially re-assembling said subsets based on a corresponding predetermined hierarchical format wherein said format string is in a predetermined Internet email address format.

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53. A method for operating domain name servers, said method comprising:

substantially dedicating at least one domain name server to serve one or more sub-level domain names wherein each said sub-level domain name is represented by at least one string of numbers in the format of a telephone number.

54. The method of Claim 53, said method further comprising:

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organizing said domain name servers to ensure said string of numbers are valid and connect an originating domain name to at least one intended destination domain name via at least one communication application;

utilizing an address-processing utility program to process said string of numbers into at least one format utilized by at least one said communication application; and

providing administrative services for said domain name for proper administration of said domain name servers.

55. The method of Claim 53, wherein at least one said domain name server is a top level domain name server.

56. The method of Claim 54, wherein said address-processing utility program is a customized world wide web resource locator.

57. The method of Claim 54, wherein said address-processing utility program is a customized electronic mail utility program.

58. The method of Claim 54, wherein said address-processing utility program is a customized telephone service feature.

59. The method of Claim 54, wherein said communication application is a world wide web resource locator.

60. The method of Claim 54, wherein said communication application is a telephone service.

61. The method of Claim 54, wherein said communication application is an electronic mail application.

62. The method of Claim 54, wherein said organizing of said domain name server include providing a manual containing an all inclusive list of permutations of said valid string of numbers.

63. The method of Claim 62, wherein said manual is an end-user manual.

64. The method of Claim 62, wherein said manual is an administrative manual.

65. The method of Claim 53, wherein said domain name server is operated by a telephone service provider.

66. A method for mapping an address string, said method comprising:

receiving as input a valid address string having at least one component wherein said component is a member of an alpha-numeric set;

mapping each said component of said address string to a predetermined corresponding number;

recognizing numeric categorical identifiers in said mapped components; and

re-sequencing said mapped components based on the recognized numeric categorical identifiers according to a predetermined hierarchical format.

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67. The method of Claim 66, said mapping further comprising:

mapping each non-numeric portion of said component of said address string to a corresponding number or symbol grouped in the format as represented on a telephone dial buttons.

68. The method of Claim 66, wherein said predetermined hierarchical format is a telephone system hierarchical format.

69. The method of Claim 66, wherein said alpha-numeric set includes all human and/or machine recognizable characters.

70. The method of Claim 66, wherein said categorical identifier is a geographical identifier.

71. The method of Claim 70, wherein said geographical identifier is a telephone country code.

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72. A system for mapping an address string, said method comprising:

an input subsystem to receive as input a valid address string having at least one component wherein said component is a member of an alpha-numeric set;

a mapping subsystem to map each said component of said address string to a predetermined corresponding number;

a recognition subsystem to recognize numeric categorical identifiers in said mapped components; and

a re-sequencing subsystem to re-sequence said mapped components based on the recognized numeric categorical identifiers according to a predetermined hierarchical format.

73. The system of Claim 72, wherein said mapping subsystem maps each non-numeric portion of said component of said address string to a corresponding number or symbol grouped in the format as represented on a telephone dial buttons.

74. The system of Claim 72, wherein said predetermined hierarchical format is a telephone system hierarchical format.

75. The system of Claim 72, wherein said alpha-numeric set includes all human and/or machine recognizable characters.

76. The system of Claim 72, wherein said categorical identifier is a geographical identifier.

77. The system of Claim 76, wherein said geographical identifier is a telephone country code.

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